Work Order ID 70952

Monday, June 20, 2011, 10:30:11 AM

Item ID: D117-762-041 **Accept** **Setup Start**

Revision ID: **Stop**

Item Name: Replacement Skidtube

Start Date: 6/21/2011 **Start Qty:** 1.00 **Cust Item ID:**

Required Date: 6/29/2011 **Req'd Qty:** 1.00 **Customer:**

Reference:

Run Start **Stop**

Approvals: **Process Plan:** MWF **Date:** 11-06-20 **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	**Revision Nbr**								
D3492	C								
D3582	Rev A								
100	DOCUMENT CONTROL	0.00				N/A			
DC	**Memo**	0.00							
Document Control	Photocopy bluefile & type labels per PPP D117-762-041 CHG001								
120	BENDING MACHINE - SKIDTUBES	0.00				1	0	11/07/11	
CNC Bend 1	**Memo**	0.00							
CNC Delta 100 Bender	Bend tube as per program D3582 on CNC Bender and Dwg D3582. Folio 3, use bending aid DT9632 2- cut fwd end of tube as per dwg								

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

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Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							
Skidtubes	Skidtubes	0.00							
Skidtubes									

Memo

1-Cut Aft end using DT8185

2-Deburr ends

3-Drill Aft Cap holes using DT8678 ***DO NOT OPEN AFT CAP HOLE***

4-Locate DT 8973 & Drill Ground wire hole on top of Tube.

5-Install 3/16 cleco in Ground wire hole ,then drill all X-Bolt holes using 3/16" drill.

6-Drill pilot holes for wearplates using DT8900

7-Open wearplate holes to Ø19/64" (0.297") as per Dwg D3582.

8- open ground wear holes to 0.391" as per section B-B

9-Open Aft Cap holes using .209" drill.

10-Drill pilot holes for section D-D and E-E. Holes must be laid out by hand. Mark out Center line and make sure that 6.65 and 5.906 measurements are respected. Double check before drilling, do not open holes to finish size.

BB 11/07/11

BE 11/07/11

Dart Aerospace Ltd

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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140		0.00							
Skidtubes	Skidtubes								
	Memo	0.00							
Skidtubes	1-Weld fwd cap D2964 per dwg D3582 and QSI 004 A/R AL ROD Batch: M112860/M 115778 BG 11/07/11 2-Grind flush DC 11/07/11								
150	QC10- Inspect visual per QSI004- ground welds	0.00							
QC		8 11/07/12							
	Memo	0.00							
Quality Control									
160	QC5- Inspect part completeness to step on W/O	0.00							
QC		8 11/07/12							
	Memo	0.00							
Quality Control									

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

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Reference:

Run Start

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Stop

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170	Chemical Conversion Coat per QSI005 4.1	0.00							
HandFinish	Memo	0.00				1		B	11/07/12
Hand Finishing									
180	QC3- Inspect Part Finish	0.00							
QC	Memo	0.00				1	0	BE	11/07/12
Quality Control									

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____ **Stop**

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190		0.00							
Skidtubes	Skidtubes								
Skidtubes	**Memo**	0.00							
	1-Open X-Bolt holes to finish size as per Dwg D3582, all sections								
	2-Counter Sink X-BOLT holes as per Dwg D3582								BB 11/07/12
	3-Deburr and blow out chips from inside of tube, prep. tube for welding.								
	4-Bond web as per Dwg D3582 & QSI 015 A/R 241 Sike Flex Batch: 116975 Exp Date: 12/01/30								BB 11/07/12
	5-Weld x-bolt spacers(D2973) as per Dwg D3582 section B-B. A/R AL ROD Batch: M12860	BB 11/07/13							
	6-Grind welds flush BB 11/07/13								
200	QC10- Inspect visual per QSI004- ground welds	0.00							
QC		S 11/07/13							
Quality Control	**Memo**	0.00							

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Item Name: Replacement Skidtube

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Required Date: 6/29/2011 **Req'd Qty:** 1.00 **Customer:**

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____ **Run Start** **Stop**

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
210 QC Quality Control	QC5- Inspect part completeness to step on W/O **Memo**	0.00 0.00							
215 HandFinish Hand Finishing	Pressure Wash per QSI005 4.3 **Memo** Touch-up alodine as per QSI	0.00 0.00							
220 Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum M117745. **Memo** START TIME 10:00 OVEN TEMPERATURE: 300° FINISH TIME: 10:40.	0.00 0.00							

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Required Date: 6/29/2011 **Req'd Qty:** 1.00 **Customer:**

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____ **Run Start**

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____ **Stop**

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
230	QC3- Inspect Part Finish	0.00				1	ϕ	M	6/07/15
QC	**Memo**	0.00							
Quality Control									
240	HandFinishing	0.00				1	ϕ	M	6/07/15
HandFinish	**Memo**	0.00							
Hand Finishing	Install Wearplate &Ground Wire inserts as per Dwg D3582.								

Work Order ID 70952

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QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____ **Stop**

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
250		0.00							
HandFinish	HandFinishing					1	ϕ	11	11/07/18
Hand Finishing	**Memo**	0.00							

1-Inspect for Foreign objects

2-Install Aft cap as per Dwg D3582, Detail "C"
A/R 241 Sika Flex Batch: M117516
Exp Date: 15/01

3-Install Wearplates as per Dwg D3582 ,
Note:Install Bolt and washer on Ground Wire inserts on top of tube see section D-D of dwg D3582
*******Do not install bolts where indicated on Dwg(Note #6)******
A/R 241 Sika Flex Batch: M117516
Exp Date: 15/01

4-assemble o'ring as per dwg D3492 and apply o'ring lube
A/R 55-o'ring lube batch: M114189

5- Wing Walk as per Dwg D3582 and QSI 005 4.4 M117568

260	QC5- Inspect part completeness to step on W/O	0.00							
QC	**Memo**	0.00							
Quality Control									

5/14/19

Work Order ID 70952

Monday, June 20, 2011 10:30:12 AM

Item ID: D117-762-041 **Accept** **Setup Start**

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Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____ **Run Start**

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____ **Stop**

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
270	Packaging	0.00							
Packaging									
	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D117-762-041 Location: PPP70954 PPP Rev:								
280	QC21- Final Inspection - Work Order Release	0.00							
QC									
	Memo	0.00							
Quality Control									

11/7/19

11/7/19

MF 11-07-19

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Monday, June 20, 2011 10:30:06 AM

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Work Order ID: 70952

Parent Item: D117-762-041

Parent Item Name: Replacement Skidtube

Start Date: 6/21/2011 **Required Date:** 6/29/2011

Start Qty: 1.00 **Required Qty:** 1.00

Comments: IPP Rev:A□07.06.11□New Issue□ EC
IPP Rev:B 08-02-22 change to revA as per dwg DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3492-11		Manufactured	No			250	Each	6.0000	2	2			
Plug										JL	11/07/18		
				Location			**Loc Qty**		**Loc Code**				
				FP			6		B71028	x2			
					70410		6						
D3492-13		Manufactured	No			250	Each	27.0000	6	6			
Plug										JL	11/07/18		
				Location			**Loc Qty**		**Loc Code**				
				FP-B			27		B71211	x6			
					46693		27						
D3492-9		Manufactured	No			250	Each	45.0000	2	2			
Plug										JL	11/07/18		
				Location			**Loc Qty**		**Loc Code**				
				FP-A			45						
					~~46694~~		45			x2			
D2962-150		Manufactured	No				Each	82.0000		1			
3.540 Outer Tube, Extrut												BE 11/07/11	
				Location			**Loc Qty**		**Loc Code**				
				HALL			82						
					28672		9			1			
					59934		73						

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W/O:		WORK ORDER CHANGES					
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Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Monday, June 20, 2011 10:30:06 AM

Work Order ID: 70952

Parent Item: D117-762-041

Parent Item Name: Replacement Skidtube

Start Date: 6/21/2011 **Required Date:** 6/29/2011

Start Qty: 1.00 **Required Qty:** 1.00

D2964	Manufactured	No	140	Each	22.0000	1	1	BG 11/07/11
Cap								

Location	Loc Qty	Loc Code	
LG002	22		
14101	8		1
64654	14		

D2971	Manufactured	No	190	Each	17.0000	1	1	BG 11/07/13
Cross Bolt Spacer								

Location	Loc Qty	Loc Code	
LG001	17		
44445	17		1

D3584-1	Manufactured	No	190	Each	0.0000	1	1	BB 11/07/12
Web		BB 011143					1	

D2973	Manufactured	No	190	Each	139.0000	2	2	BG 11/07/13
Cross Bolt Spacer								

Location	Loc Qty	Loc Code	
LG002	139		
14636	139		2

D3662-3	Manufactured	No	190	Each	17.0000	1	1	BG 11/07/13
Crossbolt Spacer								

Location	Loc Qty	Loc Code	
LG001	17		
44456	17		1

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Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

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Picklist Print

Monday, June 20, 2011 10:30:07 AM

Work Order ID: 70952

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Parent Item Name: Replacement Skidtube

Start Date: 6/21/2011 **Required Date:** 6/29/2011

Start Qty: 1.00 **Required Qty:** 1.00

D3662-1	Manufactured	No	190	Each	7.0000	3	3	BG 11/07/13 B71799 x3
Crossbolt Spacer								

Location	Loc Qty	Loc Code
LG001	7	
64451	7	

ALS4-1032-130	Purchased	No	240	Each	1,498.000	36	36	JL 11/07/18
Insert								

Location	Loc Qty	Loc Code
ST281	8	
117331	8	
ST282	1490	
117717	1490	X36

ALS4-428-165	Purchased	No	240	Each	529.0000	2	2	JL 11/07/18
Inserts								

Location	Loc Qty	Loc Code
FP	486	
117769	486	
FP-B	43	
114172	43	X2

D2965	Manufactured	No	250	Each	28.0000	1	1	JL 11/07/18
Cap, 105 Skidtube								

Location	Loc Qty	Loc Code
FP006	28	
52057	28	X1

Dart Aerospace Ltd

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Start Date: 6/21/2011 **Required Date:** 6/29/2011

Start Qty: 1.00 **Required Qty:** 1.00

D3508-3	Manufactured	No	250	Each	6.0000	1	1	
Wearplate								

Location	Loc Qty	Loc Code
FP021	6	
38527	1	
67489	5	B71210

D3508-9	Manufactured	No	250	Each	10.0000	1	1	
Wearplate								

Location	Loc Qty	Loc Code
FP021	10	
70307	10	

D3558-3	Manufactured	No	250	Each	9.0000	1	1	
Gasket								

Location	Loc Qty	Loc Code
FP014	9	
~~67486~~	9	

D3558-9	Manufactured	No	250	Each	6.0000	1	1	
Gasket								

Location	Loc Qty	Loc Code
FP014	6	
55469	6	

D3558-11	Manufactured	No	250	Each	11.0000	1	1	
Gasket								

Location	Loc Qty	Loc Code
FP014	11	
70312	11	

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Start Date: 6/21/2011 **Required Date:** 6/29/2011

Start Qty: 1.00 **Required Qty:** 1.00

D3558-13	Manufactured	No		250	Each	25.0000	1	1	
Gasket									M 11/07/18

Location	Loc Qty	Loc Code	
FP014	25		
59558	25		x1

D3508-11	Manufactured	No		250	Each	9.0000	1	1	
Wearplate									M 11/07/18

Location	Loc Qty	Loc Code	
FP016	9		
69941	9		x1

D3508-13 *	Manufactured	No		250	Each	3.0000	1	1	
Wearplate									M 11/07/18
					D71072				

Location	Loc Qty	Loc Code	
FP016	3		
65191	3		

AN960JD10L NAS1149D0332J	Purchased	No		250	Each	0.0000	2	2	
Washer					M117087				x2 M 11/07/18

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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Start Date: 6/21/2011 **Required Date:** 6/29/2011

Start Qty: 1.00 **Required Qty:** 1.00

AN3C4A	Purchased	No	250	Each	2,243.000	28	28	
BOLT								M 11/07/18

Location	Loc Qty	Loc Code	
ST350	2243		
117094	241		
117313	2		
117688	800		x28
117795	500		
117872	200		
118012	500		

AN3C5A	Purchased	No	250	Each	1,413.000	2	2	
Bolt								M 11/07/18

Location	Loc Qty	Loc Code	
FP-A	7		
115835	7		
ST350	1406		
116419	28		
116549	54		
117343	500		
117508	24		
117764	300		
117872	500		x2

AN960JD416L ~~NAS1149D0416J~~	Purchased	No	250	Each	29.0000	2	2	
Washer								M 11/07/18

Location	Loc Qty	Loc Code	
FP-B	29		
110153	29	M116513	x2

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Picklist Print

Monday, June 20, 2011 10:30:08 AM

Work Order ID: 70952

Parent Item: D117-762-041

Parent Item Name: Replacement Skidtube

Start Date: 6/21/2011 **Required Date:** 6/29/2011

Start Qty: 1.00 **Required Qty:** 1.00

AN960C10L	~~NAS1149C0332R~~	Purchased	No	250	Each	0.0000	28	28	
washer									
AN4-4A		Purchased	No	250	Each	96.0000	2	2	
Bolt									

Location	Loc Qty	Loc Code	
FP-B	44		
114615	44		x2
ST356	52		
114615	52		

NAS1611-012		Purchased	No	250	Each	50.0000	6	6	
O-RING									

Location	Loc Qty	Loc Code	
FP-A	50		
113845	50		x6

NAS1611-015		Purchased	No	250	Each	85.0000	2	2	
O-RING									

Location	Loc Qty	Loc Code	
FP-A	85		
115101	85		x2

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

Picklist Print

Monday, June 20, 2011 10:30:08 AM

Work Order ID: 70952

Parent Item: D117-762-041

Parent Item Name: Replacement Skidtube

Start Date: 6/21/2011 **Required Date:** 6/29/2011

Start Qty: 1.00 **Required Qty:** 1.00

NAS1611-016	Purchased	No	250	Each	103.0000	2	2	
O-RING								

Location	Loc Qty	Loc Code
FP-A	103	
107178	1	
112492	58	
113524	44	

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

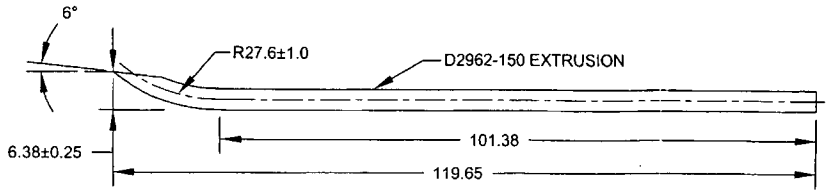
H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

PARTS LIST FOR D3582-041 SKIDTUBE ASSEMBLY

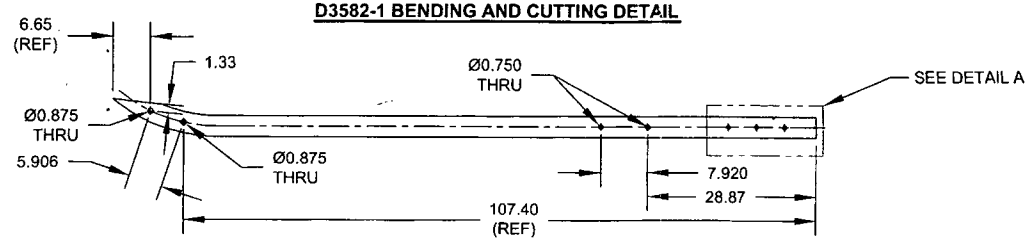
Qty	Part Number	Description
X	D3582-041	SKIDTUBE ASSEMBLY
1	D2962-150	EXTRUSION
1	D2964	CAP
1	D2965	CAP
1	D2971	CROSS BOLT SPACER
2	D2973	CROSS BOLT SPACER
2	D3492-049	PLUG ASSEMBLY
2	D3492-051	PLUG ASSEMBLY
6	D3492-053	PLUG ASSEMBLY
1	D3508-3	WEARPLATE
1	D3508-9	WEARPLATE
1	D3508-11	WEARPLATE
1	D3508-13	WEARPLATE
1	D3558-3	GASKET
1	D3558-9	GASKET
1	D3558-11	GASKET
1	D3558-13	GASKET
1	D3584-1	WEB
3	D3662-1	CROSS BOLT SPACER
1	D3662-3	CROSS BOLT SPACER
36	AELS-1032-130	INSERT
2	ALS7-428-165	INSERT
28	AN3C4A	BOLT
2	AN3-5A	BOLT
2	AN4-4A	BOLT
28	AN960C10L	WASHER
2	AN960JD10L	WASHER
2	AN960JD416L	WASHER

GENERAL NOTES:

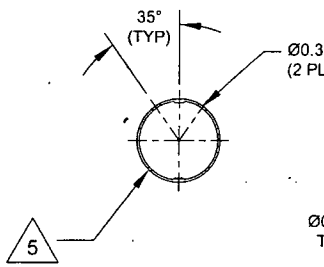
1) ALL DIMENSIONS ARE IN INCHES
2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
3) WELDING TO BE DONE PER DART QSI 004.
4) INSERT D3584-1 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015 AFTER BENDING.
5) USE DART DRILL TEMPLATE DT8900 TO LOCATE AND DRILL Ø0.297 HOLES (36 PLACES) FOR WEARSHOE INSERTS. INSTALL AELS-1032-130 PER SECTION G-G (36 PLACES) AFTER FINISH. SEAL WEARPLATE BOLTS WITH SIKAFLEX-241/-291.
6) DO NOT INSTALL AN3C4A BOLTS AND AN960C10L WASHERS IN INDICATED LOCATIONS.
7) FINISH:
   A) CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSERTING D3584-1 WEB.
   B) POWDER COAT ASSEMBLY GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3.
   C) ANTI-SKID PAINT AS INDICATED TO 1.00 ABOVE CENTER LINE PER DART QSI 005 4.4



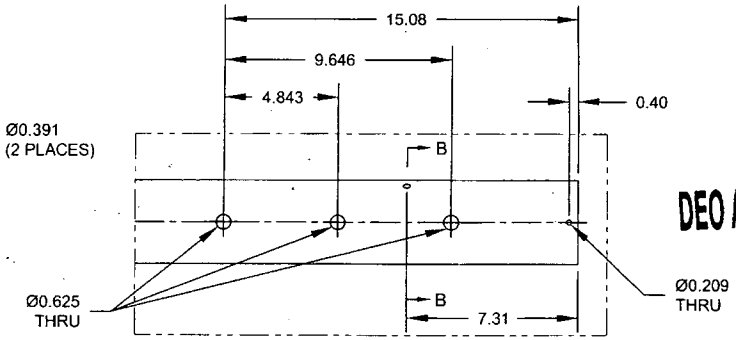
D3582-1 BENDING AND CUTTING DETAIL



D3582-1 DRILLING DETAIL



SECTION B-B
SCALE 1:5



DETAIL A
SCALE 1:5

DEO ATTACHED

RELEASED 07.11.22

70952

REV.	DESCRIPTION	BY	DATE
A	NEW ISSUE	PH	07.06.08

DESIGN	PH	DART AEROSPACE USA, INC PORT HADLOCK, WA
DRAWN	PH	
CHECKED		DRAWING NO. D3582 — REV. A — SHEET 1 OF 2
MFG. APPR.		
APPROVED		TITLE: BK 117 SKIDTUBE ASSEMBLY — SCALE 1:20
DE APPR.		
DATE	07.06.08	

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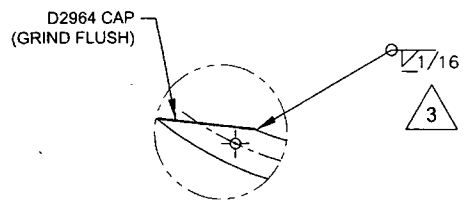
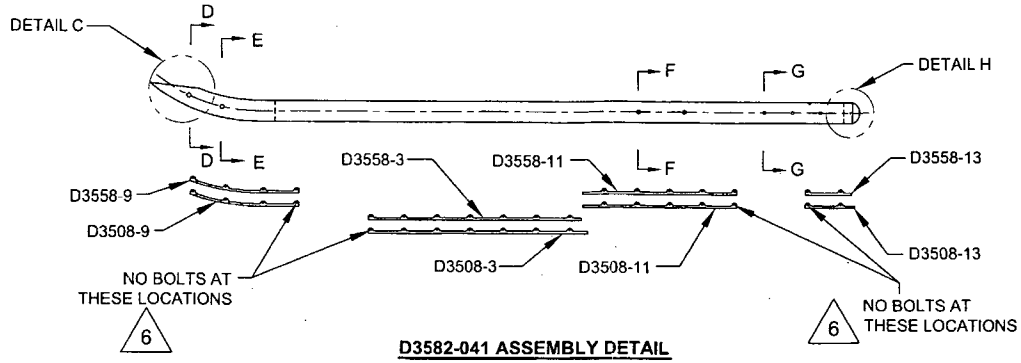
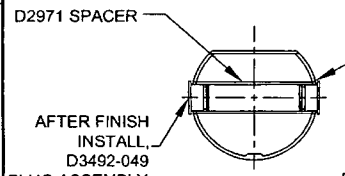


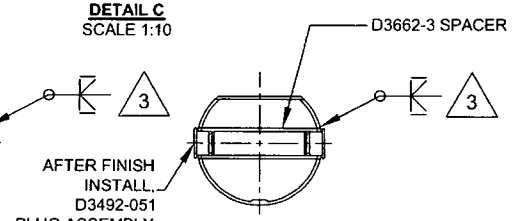
DETAIL C
SCALE 1:10



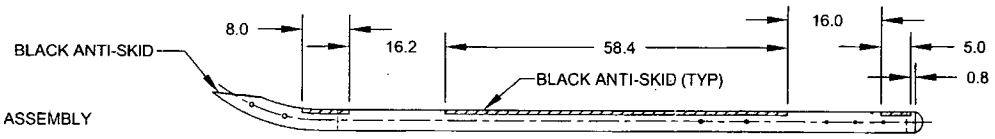
D3582-041 ASSEMBLY DETAIL



SECTION D-D
SCALE 3:10



SECTION E-E
SCALE 3:10



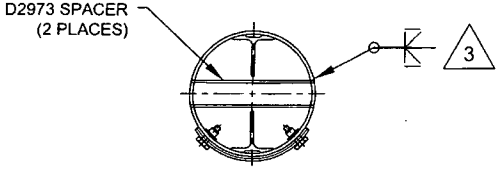
D3582-041 BLACK ANTI-SKID DETAIL

DEO ATTACHED

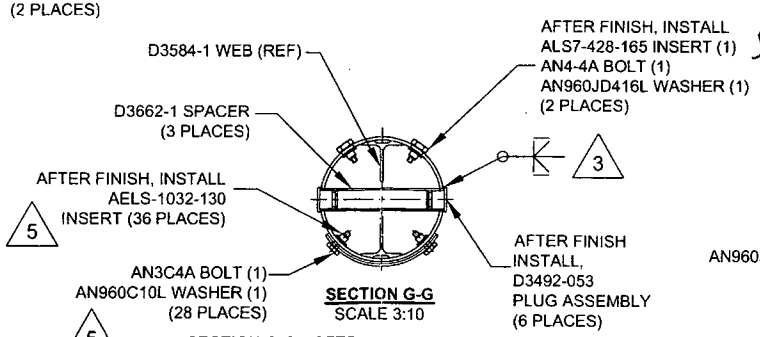
#70952

SECTION D-D NOTES
AFTER BENDING AND DRILLING ASSEMBLY
PERFORM THE FOLLOWING:
1. CHAMFER HOLE 0.030 x 45°
2. INSERT D2971 SPACER
3. WELD INTO PLACE AND GRIND FLUSH
4. PASS Ø0.750 DRILL TO REMOVE SPILL OVER
5. AFTER FINISH, INSTALL D3492-049 PLUG ASSEMBLY (2 PLACES)

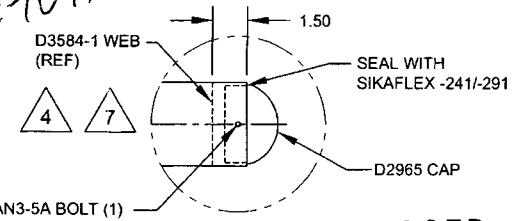
SECTION E-E NOTES
AFTER BENDING AND DRILLING ASSEMBLY
PERFORM THE FOLLOWING:
1. CHAMFER HOLE 0.030 x 45°
2. INSERT D3662-3 SPACER
3. WELD INTO PLACE AND GRIND FLUSH
4. PASS Ø0.672 DRILL TO REMOVE SPILL OVER
5. AFTER FINISH, INSTALL D3492-051 PLUG ASSEMBLY (2 PLACES)



SECTION F-F
SCALE 3:10



SECTION G-G
SCALE 3:10



DETAIL H
SCALE 1:5

RELEASED
07.11.22

SECTION F-F NOTES
AFTER BENDING AND DRILLING ASSEMBLY
PERFORM THE FOLLOWING:
1. CHAMFER HOLE 0.030 x 45°
2. INSERT D2973 SPACER (2 PLACES)
3. WELD INTO PLACE AND GRIND FLUSH
4. PASS Ø0.625 DRILL TO REMOVE SPILL OVER

SECTION G-G NOTES
AFTER BENDING AND DRILLING ASSEMBLY
PERFORM THE FOLLOWING:
1. CHAMFER HOLE 0.030 x 45°
2. INSERT D3662-1 SPACER (3 PLACES)
3. WELD INTO PLACE AND GRIND FLUSH
4. PASS Ø0.515 DRILL TO REMOVE SPILL OVER
5. AFTER FINISH, INSTALL D3492-053 PLUG ASSEMBLY (6 PLACES)

DESIGN	AH	**DART AEROSPACE USA, INC** PORT HADLOCK, WA	
DRAWN	AH		
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D3582	SHEET 2 OF 2
APPROVED		TITLE	SCALE
DE APPR.		BK 117 SKIDTUBE ASSEMBLY	1:20
DATE	07.06.08		

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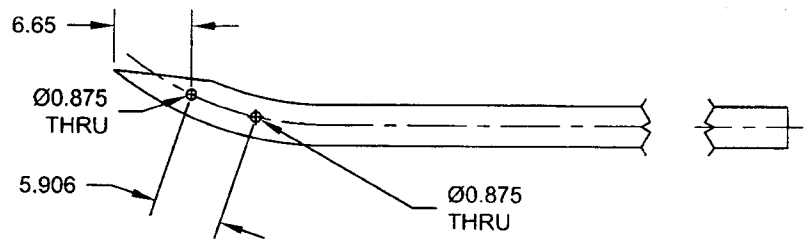
DRAWING NO.	TITLE	REV. A	DART AEROSPACE USA, INC	D.E.O. NO.	SHEET NO.	SCALE
D3582	BK 117 SKIDTUBE ASSEMBLY		ENGINEERING ORDER	D3582-A-1	SHEET 1 OF 1	NTS

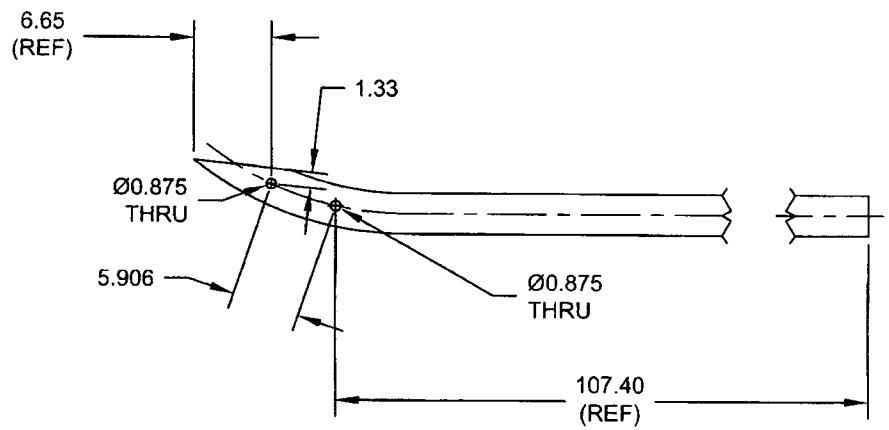
DRAWN	CHECKED	MFG. APPR.	APPROVED	DE APPR.
DATE 09.04.06	DATE 04.04.06	DATE 09.04.06	DATE 09/04/06	DATE 09.04.06

FOR EASE OF MANUFACTURE AND TO ENSURE THE FIT OF BRISTOL WIRESTRIKE SKID GEAR DEFLECTOR:
UPDATE DIMENSIONING OF 2 FWD HOLES ON SHEET 1 AS SHOWN

IS:



WAS:



#70592

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09/04/22

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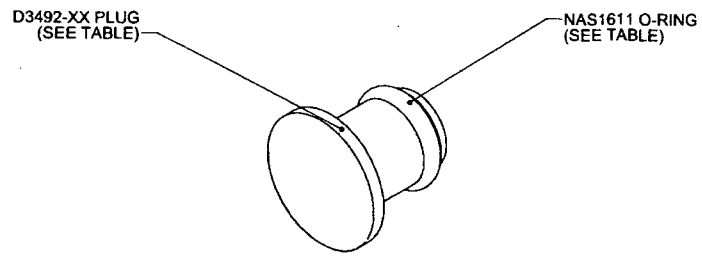

D3492-XXX PLUG PARTS LIST

QTY -041	QTY -043	QTY -045	QTY -047	QTY -049	QTY -051	QTY -053	PART NUMBER	DESCRIPTION
X							D3492-041	PLUG ASSEMBLY
	X						D3492-043	PLUG ASSEMBLY
		X					D3492-045	PLUG ASSEMBLY
			X				D3492-047	PLUG ASSEMBLY
				X			D3492-049	PLUG ASSEMBLY
					X		D3492-051	PLUG ASSEMBLY
						X	D3492-053	PLUG ASSEMBLY
1							D3492-1	PLUG
	1						D3492-3	PLUG
		1					D3492-5	PLUG
			1				D3492-7	PLUG
				1			D3492-9	PLUG
					1		D3492-11	PLUG
						1	D3492-13	PLUG
		1					NAS1611-005	O-RING
			1				NAS1611-007	O-RING
1							NAS1611-010	O-RING
						1	NAS1611-012	O-RING
	1						NAS1611-013	O-RING
					1		NAS1611-015	O-RING
				1			NAS1611-016	O-RING

NOTES:
1) O-RING: POSSIBLE SUPPLIER P/N: NAS1611-XXX OR PARKER 2-XXX

70952

RELEASED
2011 -05- 30

REV.	DESCRIPTION	BY	DATE
D	INCORPORATED DEO D3492-C-1. SHT 2 DIM C FOR -1 WAS 0.055. (SEE CAR11-048)	AJS	11.05.24
C	ADD -049/-051/-053, CHANGE DRAWING FORMAT	PH	07.10.05
B	ADD -047; UPDATE DIM A FOR -045	PH	08.05.11
A	NEW ISSUE	PH	06.01.04

DESIGN	PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO. D3492	REV. D SHEET 1 OF 2
MFG. APPR.			
APPROVED		TITLE PLUG	SCALE 2:1
DE APPR.			
DATE	11.05.24		

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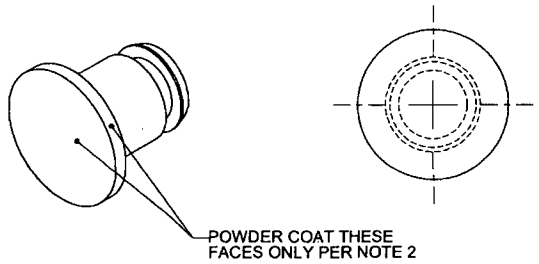
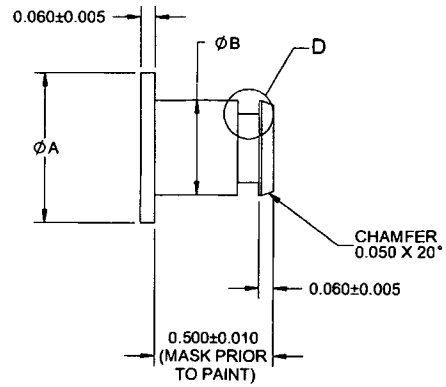
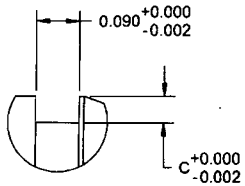




D3492-XX PLUG



DETAIL D

D3492-XX PLUG MACHINING DETAILS

P/N	A	B	C	MATERIAL SPEC
D3492-1	0.625	0.394	0.050	M6061T6R0.625
D3492-3	0.750	0.582	0.045	M6061T6R0.750
D3492-5	0.375	0.188	0.045	M6061T6R0.375
D3492-7	0.500	0.270	0.045	M6061T6R0.500
D3492-9	0.938	0.750	0.045	M6061T6R1.000
D3492-11	0.850	0.664	0.045	M6061T6R0.875
D3492-13	0.750	0.510	0.045	M6061T6R0.750

D

D

70952

RELEASED
2011 -05- 3

NOTES:
1) MATERIAL: ALUMINUM 5052-H32 OR 6061-T6 OR 1100-0 PER QQ-A-225/7 (5052) OR
QQ-A-225/8 (6061) OR QQ-A-200/8 (6061) OR QQ-A-225/1 (1100)
(REF. DART MATERIAL SPEC M6061T6R0.000)
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT WHITE GLOSS (4.3.5.1) PER DART QSI 005 4.3
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT: N/A

DESIGN	PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN	A.S	
CHECKED		DRAWING NO. D3492 — REV. D — SHEET 2 OF 2
MFG. APPR.		
APPROVED		TITLE PLUG — SCALE 4:1
DE APPR.		
DATE 11.05.24		

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NO. 245

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barklay Elliott
Job number: 65186
Part number: D117-762-041
Description: 117 Skid tube
Welding Process: Tig[✓] Mig[ ]
Base materiel: Aluminum
Current: AC[✓] DC[ ]

TEST REQUIREMENTS AND RESULTS

Visual:	pass[✓]	fail[ ]
Penetration:	pass[✓]	fail[ ]

UNACCEPTABLE

Cracks:	pass[✓]	fail[ ]
Undercut:	pass[✓]	fail[ ]
Pin holes:	pass[✓]	fail[ ]
Overlap (cold lap)	pass[✓]	fail[ ]
Porosity (surface):	pass[✓]	fail[ ]
Coloration:	pass[✓]	fail[ ]

Qualifier [signature] **Date of Test Coupon** 11·01·31

Welder [signature] **Date of Test Coupon** 11·01·31

The above named individual is qualified in accordance with AWS D17.1.2001 to weld